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Section SF 30 - BLOCK 14 CONTINUATION PAGE

## **FUNDING**

This delivery order is hereby awarded and fully funded in the amount of \$471,518.53. As a result, the total amount of funding obligated and available for payment under this order is \$471,518.53. In accordance with contract clause 52.232-22, Limitation of Funds, the Government is not obligated to reimburse the contractor for any costs incurred in excess of \$471,518.53.

## Section B - Supplies or Services and Prices

ITEM NO 0002	SUPPLIES/SERVICES  Engineering and Technica CPFF FOB: Destination	QUANTITY  I Servcies	UNIT Lot	UNIT PRICE	AMOUNT (b) (4)					
		IATED COST FIXED FEE								
			TOTAL EST	COST + FEE	(b) (4)					
ITEM NO 000201	SUPPLIES/SERVICES	QUANTITY	UNIT	UNIT PRICE	AMOUNT (b) (4)					
	Funding for CLIN 0002 CPFF FOB: Destination PURCHASE REQUEST NUMBER: 1300554607									
		IATED COST FIXED FEE								
	ACRN AA CIN: 130055460700001		TOTAL EST	COST + FEE	(b) (b) (4)					
ITEM NO 0004	SUPPLIES/SERVICES Support Costs COST FOB: Destination	QUANTITY	UNIT Lot	UNIT PRICE	AMOUNT (b) (4)					

ESTIMATED COST

N65540-15-D-0004 0010 Page 4 of 14

ITEM NO SUPPLIES/SERVICES QUANTITY UNIT **UNIT PRICE** AMOUNT 000401 (b) (4) Funding for CLIN 0004 COST FOB: Destination PURCHASE REQUEST NUMBER: 1300554607 ESTIMATED COST ACRN AA CIN: 130055460700002 SUPPLIES/SERVICES QUANTITY ITEM NO UNIT **UNIT PRICE AMOUNT** (b) (4) 0005 Technical Data **CDRLS** FOB: Destination **FFP NET AMT** 

#### STATEMENT OF WORK

#### STATEMENT OF WORK

## 1 SCOPE

1.1 Provide materials, tooling and personnel to accomplish HFC-236fa Ship Alteration on R-114 Air Conditioning Plants on (b) (2) (2 AC Plants). In support of 236FA conversion, provide POA&M to track program installations milestones for each ALT. These alterations replace existing CFC type refrigerant with approved HFC alternatives and modifies the plants for proper cooling operation. The modifications are necessary due to the production phase out of CFC Refrigerants in accordance with the 1990 Amendments of the US Clean Air Act and the Presidential Announcement of 11 February 1992.

## 2 APPLICABLE DOCUMENTS / REFERENCES

- 2.1 Ship Alteration Record DDG(b) (2)
- 2.2 NAVSEA S9AAO-AB-GOS-010, "General Specifications for Overhaul (GSO) of Surface Ships"
- **2.3** NAVSEA SL720-AA-MAN-010/FMP, "Fleet Modernization Program (FMP) Management and Operations Manual"
- 2.4 Mil-STD-2003, Military Standard for electrical Wiring
- 2.5 NAVSEA S6430-AE-TED-010, Flexible Hose Assemblies
- 2.6 NAVSEA DRWG. 810-1385506, Hose Schedule for Shipboard Services
- **2.7** MIL-STD-777E SH.
- **2.8** MIL-R-16743
- **2.9** NAVSEA S9073-A2-HBK-010
- **2.10** HFC-236fa Installation Instructions
- **2.11** NAVSSES Instruction 4720-2F
- 2.12 MIL-STD-1689, Fabrication, Welding and Inspection; Structural
- **2.13** MIL-STD-2035, Non Destructive Test Acceptance Criteria
- **2.14** STD 810-4714432, Hangers, Fabrication Details and Installation

- 2.15 NAVSEA 0967-LP-000-0110, Electrical Installation and Maintenance Book
- **2.16** MIL-STD-1627, Bending of Pipe or Tubing for Ship Piping Systems
- **2.17** NAVSEA 9090-310G
- 2.18 NAVSEA Standard Items
- **2.19** Ship Installation Drawings

## 3 <u>TECHNICAL REQUIREMENTS</u>

- **3.1** The contractor will ensure that all shipboard industrial work is accomplished IAW NSTS 9090.310G and NSWCPDINST 4720-2F for quality control. QA workbooks shall be created for each new alteration and provided to the appropriate On-Site Installation Coordinator (OSIC) no less than 14 days before the start of the alteration.
- **3.2** In accordance with the Naval Surface Warfare Center Philadelphia Division (NSWCPD) schedule and as coordinated by the OSIC, conduct a Pre-Alteration Site Survey / Shipcheck to determine the condition of, and requirements for, overhaul or replacement of items in accordance with NSWCPD test procedures. Determine requirements for removal of interferences and establish removal and access routes for the equipment to be removed and installed. Identify equipment locations for the modification of new electrical enclosures, piping runs, and mounting brackets. Provide Ship Check Report with results of Site Survey and Installation Sketches to NSWCPD utilizing government provided data sheets.
- **3.3** Based on site survey and any unique repairs authorized by NSWCPD, provide POA&M estimate of material and labor to accomplish conversion of each plant prior to start of work. Estimate to specifically identify cost for repair/overhaul of items not part of the conversion.
- **3.4** Provide copy of site survey and ship check report containing plant/equipment and a report of recommended repairs within five (5) working days of survey completion.

## 4 REQUIREMENTS

**4.1** In accordance with the NSWCPD schedule and as coordinated by the On-Site Installation Coordinator (OSIC), provide engineering services, manpower, material support, and required technical supervisory and field service support to modify designated shipboard Air Conditioning in accordance with the HFC-236fa Installation Kits/Procedures provided as GFM / I and Reference 2.10.

- 4.2 In accomplishing this work, the contractor shall:
  - 4.2.1 Ensure compliance with all safety regulations, including obeying and providing for the local personal protection equipment (PPE) requirements (hardhats with chin straps, steel toed safety shoes, safety eye wear, and hearing protection) per local requirements.
  - 4.2.2 Conform to shipboard routine with regard to cleanliness, personnel conduct, and the ship's security and integrity.
- **4.3** Teams will be required in San Diego, CA.
- **4.4** Team members in the Site Foreman labor category shall have experience, which includes installation and repair of shipboard refrigeration/air conditioning plants.
- **4.5** Team members tasked to perform conversion, repair and alterations on installed/existing Air Conditioning equipment that could be expected to release Class 1 (CFC) refrigerants into the atmosphere shall obtain EPA approved Universal technician certification in accordance with Section 608 of the U.S. Clean Air Act, 1990, as amended.
- **4.6** In accordance with the NSWCPD schedule and as coordinated by the NSWCPD Field Representative, provide storage containers at each pier side site for staging of materials to support the HFC-236fa installation programs.
- **4.7** The contractor shall provide special materials and inspection services for the use as required to support the installation.
- **4.8** The contractor shall have a Quality System that complies with paragraph 4.3.1 of the contract. Additionally the contractor shall have a QA Workbook that has been reviewed by NSWCPD.
- **4.9** The contractor must provide necessary personnel certifications and QA records with respect to material prefabricated off-site.
- **4.10** Technical guidance for all work accomplished under this delivery order shall be the local OSIC and the Subject Matter Expert (SME).
- **4.11** The contractor shall in all cases defer to the local OSIC regarding any installation information and interface with ships force.
- **4.12** The contractor shall provide a detailed estimate to complete work within 24 hours of submitting a Condition Report.
- **4.12a** In accordance with the NSWCPD schedule and as coordinated by the On-Site

Field Representative, install HFC-236fa Ship Alteration DDG51-151.01K (2 plants) on R-114 Ships Air Conditioning Plants as specified utilizing References 2.1-2.19, government and contractor furnished material, and the following paragraphs as guidance.

- **4.13** Remove the refrigerant of the designated plants.
- **4.14** Remove compressor oil into a suitable container for disposal.
- **4.15** Return recovered refrigerant and oil to the OSIC for disposal or dispose of as directed by the OSIC.
- **4.16** Remove required plant equipment.
- **4.17** Provide services to deliver equipment removed from the ship that is considered scrap to DRMO unless otherwise directed by NSWCPD.
- **4.18** Open and inspect Hot Gas By-Pass Valve, report findings to OSIC and NSWCPD Code 218 Project Manager.
- **4.19** Inspect Condenser Shells, only in the presence of a York (JCI) Factory Representative.
- **4.20** Provide services to recover and clean R-11 hydrostatic test refrigerant bringing it back to ARI -700 standards. All R-11 supplied by NSWCPD will then be returned to NSWCPD after being cleaned to ARI-700 standards.
- **4.21** Install/Modify foundations, electrical panels and piping as required to suite the installation. Accomplish modifications to the lube oil system as specified by Reference 3.10.
- **4.22** Accomplish specific unique repairs authorized by NSWCPD required to support post conversion operation and testing. Included in these repairs may be the modification of installed and operational Halocarbon Monitors to permit detection of HFC-236fa.
- **4.23** Requirements listed in NAVSEA Standard Item 009-24 must be followed when removing any piping or piping components.
- **4.24** Refrigerant escape to atmosphere (REA) piping downstream of the relief valve shall be welded 90-10 copper-nickel. Brazed joints and mechanically attached fittings are prohibited.
- **4.25** Make necessary modifications to existing plant as specified SHIPALT 236fa Installation Procedures.
- **4.26** Install government provided conversion material, refrigerant and POE oil.
- **4.27** All new or disturbed piping is to be pressure tested and proven to be free of obstructions prior to flushing the affected systems.

- **4.28** Leak test and flush piping systems in accordance with JCI /NSWCPD HFC-236fa procedure (Reference 2.10).
- **4.29** With a JCI Factory Representative on-site, observe and assist in their operational testing of the modified plant in accordance with applicable technical manuals, existing test procedures, and test specifications.
- **4.30** Brief the crew in the operation of the modified plants.

## **5.0 DELIVERABLES:**

- **5.1** Provide a detailed Installation Plan of Action & Milestones (POA&M) Schedule. The initial POA&M will be submitted within ten (10) working days after award of this delivery order. The POA&M will be updated bi-weekly. (CDRL A003)
- 5.2 Provide a QA workbook as detailed in Par 1.13 including all personnel qualifications and certifications for those that will be onboard the install. This QA workbook is to be submitted to NSWCPD one month prior to the start of each installation. Upon completion of the installation the contractor shall provide the Program Manager a copy of the QA workbook and completed IPCPs. (CDRL A004)
- 5.3 Prior to the start of the installation, contractor shall review and sign the Industrial/Alteration Pre-Start Checklist (see Enclosure (6) of NSWCPD Instr. 4720.2F "Process and Policy for Shipboard Industrial Work") for each installation. (CDRL A013)
- Upon completion of the installation, provide two (2) hard copies and one electronic copy of red-lined marked drawings reflecting final configuration to NSWCPD-SSES within (2) weeks of the installation completion date. (CDRL A014)

#### 6 SCHEDULE

6.1 The installation shall take place during (b) (2) FY16 Selected Restricted Availability (SRA) period starting June 6 2016- October 14 2016.

## 7 GOVERNMENT FURNISHED MATERIAL/INFORMATION (GFM/I)

- 7.1 SHIPALT HFC-236fa Installation Kits
- **7.2** SHIPALT 236fa Installation Procedures and Quality Assurance Plans
- **7.3** 236fa Ship Check Forms

## 8 GOVERNMENT SUPPLIED SUPPORT SERVICES

**8.1** Temporary services to include: Lighting, Ventilation, Electrical Power 110 & 440, Compressed Air minimum of 100 PSI.

**8.2** Service support to include: Welding, Brazing, Firewatch, Crane, Rigging, Painting & Lagging.

## 9 TRAVEL

**9.1** Not Authorized.

## 10 OVERTIME

**10.1** Overtime will be required to support emergent ship schedules and shortened pier side availabilities. Overtime will also minimize the down time of Combat Systems equipment and allow completion to support the ship's operation schedule.

## 11 <u>CONTRACTOR PERSONNEL IDENITIFICATION</u>

11.1 In the performance of this contract, contractor employees shall identify themselves as contractor personnel by introducing themselves or being introduced as contractor personnel and by displaying distinguishing badges or other visible identification for meetings with government personnel. Contractor personnel shall appropriately identify themselves as contractor employees in telephone conversations and formal and informal written correspondence.

## 12 CLASSIFIED MATERIAL/INFORMATION:

- 12.1 No access to classified material/information will be required for this Delivery Order.
- 13 PERIOD OF PERFORMANCE: Date of Award to 30 October 2016
- 14 CONTRACTING OFFICER'S REPRESENTATIVES (COR)
- 14.1 The COR for this contract is (b) (6) Code (b) Phone: (b) (6)
- 15 SUBJECT MATTER EXPERT (SME)
- 15.1 The SME for this delivery order is (b) (6) Code (b), Phone: (b) (6)
- 16 FINANCIAL POINT OF CONTACT: (b) (6) Code (b) (6)

(b)

Section E - Inspection and Acceptance

# INSPECTION AND ACCEPTANCE TERMS

# Supplies/services will be inspected/accepted at:

CLIN	INSPECT AT	INSPECT BY	ACCEPT AT	ACCEPT BY
0002	Destination	Government	Destination	Government
000201	Destination	Government	Destination	Government
0004	Destination	Government	Destination	Government
000401	Destination	Government	Destination	Government

# **DELIVERY INFORMATION**

CLIN	DELIVERY DATE	QUANTITY	SHIP TO ADDRESS	DODAAC
0002	POP 25-MAR-2016 TO 30-DEC-2016	N/A	NAVAL SURFACE WARFARE CENTER PHILA (b) (6) NAVAL BUSINESS CENTER 1601 LANGLEY AVE, (b) (6) PHILADELPHIA PA 19112-5051 (b) (6) FOB: Destination	N64498
000201	N/A	N/A	N/A	N/A
0004	POP 25-MAR-2016 TO 30-DEC-2016	N/A	NAVAL SURFACE WARFARE CENTER PHILA (b) (6) NAVAL BUSINESS CENTER 1601 LANGLEY AVE, (b) (6) PHILADELPHIA PA 19112-5051 (b) (6) FOB: Destination	N64498
000401	N/A	N/A	N/A	N/A

Section G - Contract Administration Data

## ACCOUNTING AND APPROPRIATION DATA

AA: 1751810 81HF 251 VU021 0 050120 2D 000000

COST CODE: A00003314292 AMOUNT: \$471,518.53 CIN 130055460700001: (b) (4) CIN 130055460700002: (b) (4)

## Section J - List of Documents, Exhibits and Other Attachments

# **CDRLS**

The following CDRLS will be uploaded into EDA:

A003 – POA&M

A004 – QUALITY ASSURANCE WORKBOOK

A007 – WORK STATUS REPORT

A014 – INSTALLATION COMPLETION NOTIFICATION

A013 – SITE SURVEY REPORT